

IN THE CLAIMS

Please amend the claims as follows:

1. (Cancelled).
2. (Currently Amended) A method of presenting stimulating an immune response to an antigenic peptide *in vivo* on the surface of a viable cancer cell, said method comprising:
contacting ~~said cancer~~ a cell with said antigenic peptide and with a photosensitizing agent *ex vivo*, wherein said peptide and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;
irradiating said cell *ex vivo* with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide into the cytosol of the cell, without killing the cell;
wherein[[,]] said released antigenic peptide, or a part thereof of sufficient size to stimulate a cytotoxic T cell response, is subsequently presented on the surface of said cell by a class I MHC molecule;
administering the cell to a mammal after irradiating said cell to thereby stimulate the *in vivo* immune response to the antigenic peptide;
~~wherein presentation of the antigenic peptide, or part thereof, on the surface of said cell results in cytotoxic T cell mediated cell killing by a cytotoxic T cell specific for said antigenic peptide or a part thereof; and~~
wherein the photosensitizing agent is selected from the group consisting of a porphyrin, phthalocyanine and a chlorin.
3. (Cancelled).
4. (Previously Presented) The method of claim 2, wherein the antigenic peptide is a vaccine antigen or vaccine component.
- 5-7. (Cancelled).

8. (Previously Presented) The method of claim 2 wherein the photosensitizing agent is meso-tetraphenylporphine with 4 sulfonate groups (TPPS₄), meso-tetraphenylporphine with 2 sulfonate groups on adjacent phenyl rings (TPPS_{2a}), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS_{2a}).

9. (Previously Presented) The method of claim 2, wherein the antigenic peptide and/or photosensitizing agent is bound to one or more targeting agents or carrier molecules.

10 -27. (Canceled).

28. (Previously Presented) The method of claim 2, wherein at least 90% of the cells are not killed.

29. (Previously Presented) The method of claim 2, wherein at least 95% of the cells are not killed.

30. (Previously Presented) The method of claim 2, wherein the photosensitizing agent is a sulfonated tetraphenylporphine, a disulfonated aluminum phthalocyanine or a tetrasulfonated aluminum phthalocyanine.

31-40. (Canceled).

41. (Previously Presented) The method of claim 2, wherein the antigenic peptide stimulates cytotoxic T cells.

42. (Canceled).

43. (Currently Amended) An *in vitro* A method of stimulating an immune response to an antigenic peptide *in vivo* presenting an antigenic peptide on the surface of a viable cancer cell and killing said cell by cytotoxic T cell mediated cell killing, said method comprising:

contacting ~~said cancer~~ a cell with ~~said~~ an antigenic peptide and with a photosensitizing agent *in vivo*, wherein said peptide and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;

irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide into the cytosol of the cell, without killing the cell;

wherein said released antigenic peptide, or a part thereof of sufficient size to stimulate a cytotoxic T cell response, is subsequently presented on the surface of said cell by a class I MHC molecule;

wherein presentation of the antigenic peptide, or part thereof, on the surface of said cell results in stimulation of the immune response ~~cytotoxic T cell mediated cell killing by a cytotoxic T cell~~ specific for said antigenic peptide or a part thereof; and

wherein the photosensitizing agent is selected from the group consisting of a porphyrin, phthalocyanine and a chlorin.

44. (Previously Presented) The method of claim 43, wherein the antigenic peptide is a vaccine antigen or vaccine component.

45. (Previously Presented) The method of claim 43, wherein the photosensitizing agent is meso-tetraphenylporphine with 4 sulfonate groups (TPPS₄), meso-tetraphenylporphine with 2 sulfonate groups on adjacent phenyl rings (TPPS_{2a}), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS_{2a}).

46. (Previously Presented) The method of claim 43, wherein the antigenic peptide and/or photosensitizing agent is bound to one or more targeting agents or carrier molecules.

47. (Previously Presented) The method of claim 43, wherein at least 90% of the cells are not killed.

48. (Previously Presented) The method of claim 43, wherein at least 95% of the cells are not killed.

49. (Previously Presented) The method of claim 43, wherein the photosensitizing agent is a sulfonated tetraphenylporphine, a disulfonated aluminum phthalocyanine or a tetrasulfonated aluminum phthalocyanine.

50. (Previously Presented) The method of claim 43, wherein the antigenic peptide stimulates cytotoxic T cells.

51. (**New**) The method of claim 43, wherein said cell is an antigen presenting cell selected from the group consisting of lymphocytes, dendritic cells and macrophages.

52. (**New**) The method of claim 2, wherein said cell is an antigen presenting cell selected from the group consisting of lymphocytes, dendritic cells and macrophages.